

REMARKS

The Office action of August 22, 2007, has been carefully considered.

Objection has been raised to the drawings as not showing every feature of the invention, and Claim 9 has been rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement.

In response, the claims of record have been canceled and replaced by a new set of Claims 18-28, and Figure 1 has been replaced by Figures 1a and 1b. Moreover the specification has been amended to add descriptive material relevant to the new Figures.

No new matter has been added in the replacement of Figure 1 by Figures 1a and 1b, as all structures shown are the structures described in the present specification, particularly in paragraphs [0020] through [0026] of the application as published. Note that the embodiment described in paragraph [0021] requires an upwardly directed flame in direction 16 from below, and includes a rectangular plate grill 12 treated with an intumescent material and an upper corresponding rectangular plate 13 of a heat absorbing and heat storing material 14, through which air can flow. Over this, there is a rim frame 15 of a heat insulating material.

In a corresponding manner, Claim 18 is directed to a ventilation device for passing air therethrough, the ventilation device including a passive fire blocking means comprising at least one grille body comprising a plurality of evenly distributed openings permitting air flow therethrough and which is formed of or coated with an intumescent material. Adjacent to and downstream from the at least one grille body there is at least one thermally conductive metal mesh permitting air flow therethrough.

The intumescent material swells when exposed to

sufficient heat to close the evenly distributed openings, and the metal mesh has a capacity for heat storage.

With the submission of new Figures 1a and 1b and new Claim 18, Applicant submits that the invention is clearly claimed and shown in the drawings, and withdrawal of the rejection under 35 USC 112 is requested.

Claims 9-11 and 16-17 have been rejected under 35 USC 102(b) as anticipated by Baltazar, and Claims 12-15 have been rejected under 35 USC 103(a) as obvious over Baltazar in view of Anderberg.

The Office action notes that Baltazar clearly discloses heat 15 passing through the structure, including layer 14, as described at column 6, lines 54-56. This portion of the specification states specifically that "[h]eat 15 that reaches the outer surface of the screen will be dissipated to the surroundings by radiation and convection."

There is no disclosure or suggestion, however, that the arrangement shown in the Baltazar reference is suitable for use as a ventilation device, passing air therethrough.

In this regard, the most notable feature of the device of Baltazar is the layer 14, which is a layer of heat insulating material used for fire protection, typically under the trade name "THERMO-LAG" or "INTERAM." In the various Figures of Baltazar, this layer 14 is shown as a solid layer, and there is no indication at all that air may pass through it. With particular reference to Figures 3A and 3B, it appears that this layer will pass heat therethrough, but no suggestion that air is passing through the layer; indeed, numerous materials that will transmit heat will not permit air to pass therethrough.

The point of using this material is that it has higher thermal conductivity than a passive insulator, and will allow more heat from the cables to dissipate to the surroundings

during normal operation. See column 1, lines 44-51.

When exposed to an external flame or high heat, the material is *inter alia* intumescent, and forms a char which prevents transmission of the heat in any direction through the insulating material.

To the contrary, the invention is directed specifically to a ventilation device which must pass air freely under normal circumstances. The disposition of such a device is shown, for example, in Figure 2 of the present application, in which the ventilation device is used to ventilate a roof. In case of exposure to an external flame from direction 16, the intumescent device reacts immediately to block the flame, and the downstream heat storing device such as pipes 14 act to prevent transmission of heat to the protected space.

Such an arrangement is not disclosed or suggested in Baltazar, in which the insulating material could not be used under normal circumstances to ventilate the space being protected. In any event, this is not the purpose of the Baltazar device, which is to provide an insulating protection device for cables, which will transmit heat outwardly, yet will protect the cables from external flame. The concept of passing air through the device is not disclosed.

Anderberg has been cited to show a lead-through for electric cables including pipes which are resistant to heat. Anderberg is directed to the same type of device as Baltazar, and not to ventilating systems for closed spaces. Thus, the combination of Baltazar and Anderberg does not disclose or suggest the invention.


Withdrawal of these rejections is requested.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

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